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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,150	11/13/2003	Todd A. Merritt	2008.001982	8235

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EXAMINER	
TORRES, JOSEPH D	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/712,150	MERRITT ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31,32 and 38-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31,32 and 38-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The Declaration does not include the signature of Nicholas VanHeel, who is listed as one of the inventors.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract exceeds 150 words. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: the reference on page 2 to Application Serial No. 09/376,786 needs to be updated to include the patent number since the case has been allowed.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (f) he did not himself invent the subject matter sought to be patented.

4. Claims 31, 32 and 38-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Bunker; Layne G. (US 6311299 B1; hereafter referred to as Bunker) The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

35 U.S.C. 102(e) rejection of claims 31, 32 and 38.

Bunker teaches a method for testing an embedded memory device having a plurality of data lines (see Figure 2 of Bunker), comprising: latching data present on at least a subset of the plurality of data lines (HFF1-HFF8 in Figure 2 of Bunker are flip-flop

latches for latching data present on at least a subset of the plurality of data lines; Note: I/01-I/08 in Figure 2 for each of the arrays A1-A8 is a data line); masking the latched data associated with at least one data line of the subset (AND gates 228-242 in Figure 2 of Bunker provide masking signals to Buffers 226 during read operations); compressing the masked data to determine if the masked data matches a predetermined pattern (col. 5, lines 54-57 in Bunker teach the masked data is compressed using compression circuits DC1-DC8 in Figure 2 of Bunker by comparing each of the applied read masked bits to predetermined values to determine if the applied read masked bits matches the predetermined values); and providing at least a pass signal if the masked data matches the predetermined pattern (col. 5, lines 35-57 in Bunker teach that E1-E8 in Figure 2 of Bunker are driven inactive if the masked data matches the predetermined values, hence E1-E8 are pass/fail signals used for monitoring operation of the embedded memory circuits).

35 U.S.C. 102(e) rejection of claim 39.

Bunker teaches providing a plurality of latches for latching the data associated with the subset (Buffers 226 in Figurer 2 of Bunker are latches for latching the data associated with the subset), providing a plurality of enable signals to the latches (AND gates 228-242 in Figure 2 of Bunker provide a plurality of enable signals to the latch buffer 226 in Figure 2); and disabling latches in the plurality of latches responsive to a deassertion of the associated enable signals (Signals from AND gates 228-242 in Figure 2 of Bunker

are masking signals used for disabling latches in the plurality of latches responsive to a deassertion of the associated enable signals).

35 U.S.C. 102(e) rejection of claim 40.

A disabled buffer 226 inherently produces a predetermined voltage at its output.

35 U.S.C. 102(e) rejection of claims 41 and 42.

The Examiner asserts that the logic value used to designate disabled can either be a one or zero, which is encompassed by the teachings in the Bunker patent since the Bunker patent teaches disabling of the buffers.

35 U.S.C. 102(e) rejection of claim 43.

Bunker teaches receiving a latch signal (MR1-MR8 in Figure 2 of Bunker are latch signals), and latching the data responsive to the latch signal being asserted in the latches with associated enable signals asserted (Buffers 226 in Figure 2 of Bunker latch read data responsive to the latch signal being asserted in the latches with associated enable signals asserted).

35 U.S.C. 102(e) rejection of claim 44.

Masked buffers 226 in Figure 2 of Bunker are substantially bypassed.

35 U.S.C. 102(e) rejection of claim 45.

Bunker teaches providing a plurality of latches for latching the data associated with the subset (BUF1-BUF8 in Figure 2 of Bunker is a latch for latching the data associated with the subset); receiving a clock signal and a latch signal (HFF1-HFF8 in BUF1-BUF8 in Figure 2 of Bunker require a clocking signal; AND gates 228-242 in Figure 2 of Bunker provide masking latch signals to Buffers 226 during read operations), and latching the data based on a first combination of the latch signal and the clock signal (Data is latched based on the clocking signals for HFF1-HFF8 and masking latch signals from AND gates 228-242 in Figure 2 of Bunker).

35 U.S.C. 102(e) rejection of claim 46.

Claim 28 in Bunker teaches the uses of NAND gates for masking.

35 U.S.C. 102(e) rejection of claim 47.

Claim 30 in Bunker teaches the uses of NOR gates for compressing.

35 U.S.C. 102(e) rejection of claim 48.

AND gates 228-242 in Figure 2 of Bunker provide masking latch signals to Buffers 226 during read operations by disabling the latching means responsive to deassertions of enable signals associated with the data lines in the subset.

35 U.S.C. 102(e) rejection of claim 49.

A disabled buffer 226 inherently produces a predetermined voltage at its output.

35 U.S.C. 102(e) rejection of claims 50 and 51.

The Examiner asserts that the logic value used to designate disabled can either be a one or zero, which is encompassed by the teachings in the Bunker patent since the Bunker patent teaches disabling of the buffers.

35 U.S.C. 102(e) rejection of claim 52.

Masked buffers 226 in Figure 2 of Bunker are substantially bypassed.

35 U.S.C. 102(e) rejection of claim 53.

Claim 28 in Bunker teaches the uses of NAND gates for masking.

35 U.S.C. 102(e) rejection of claim 54.

Claim 30 in Bunker teaches the uses of NOR gates for compressing.

5. Claims 31, 32 and 38-54 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Note: the subject matter of the current invention is full disclosed in Bunker; Layne G. (US 6311299 B1). See previous rejection, above.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 31, 32 and 38-54 are rejected under the judicially created doctrine of double patenting over claims 27-32 of U. S. Patent No. 6311299 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: claims 27-32 of U. S. Patent No. 6311299 teaches all of the elements of claims 31, 32 and 38-54.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

7. Claims 31, 32 and 38-54 are rejected under the judicially created doctrine of double patenting over claims 1-21 of U. S. Patent No. 6735729 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: claims 1-21 of U. S. Patent No. 6735729 teaches all of the elements of claims 31, 32 and 38-54.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ke; Wuudiann (US 5774477 A) teaches technique for applying pseudorandom patterns to test interconnects in a Boundary-Scan environment (Note: Figure 2 in Ke substantially teaches the Applicant's claims 31 and 38).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (703) 308-7066. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 2133